

OCT 21 1999

9 MR. HALSTEAD: Thank you, Barry. For the
10 record, I'm Robert Halstead, transportation
11 adviser to State of Nevada Agency for Nuclear
12 1... Projects. [One of the issues that has come up
13 repeatedly, mostly in the earlier session today,
14 is the issue of full-scale physical testing of
15 shipping casks and whether that's required and
16 whether it's a good idea to demonstrate the crash
17 survivability of the casks. I'd like to restate
18 for the record the State of Nevada's longstanding
19 policy recommendation to the Department of Energy
20 that all of the new cask designs that will be used
21 for the repository program should be subjected to
22 full-scale physical testing to determine whether
23 they actually meet the four key performance
24 standards established by the Nuclear Regulatory
25 Commission's regulations. Further, I'd like to

1 clarify the situation with current licensed casks
2 1... in this country. To the best of our knowledge,
3 there are only two Type B shipping packages which
4 have been subjected to full-scale testing. One
5 was the TRUPACT II package developed for shipments
6 of transuranic waste to the Waste Isolation Pilot
7 Plant in New Mexico. The other was full-scale
8 testing of the interior canister for the NUCPAC
9 125B cask, which was developed for shipping to
10 Three Mile Island core debris to Idaho. That's a
11 rail cask.

12 MR. LAWSON: Excuse me, Mr. Halstead. I must
13 ask, if there are conversations, please, can I ask
14 those folks to go outside? Thank you.

15 MR. HALSTEAD: So this morning -- and Steve
16 Maheras (phonetically) may want to correct me if
17 I'm wrong. But earlier today, when questions from
18 the audience and there was a response from the
19 1... table that some packages had been tested, to the
20 best of our knowledge, in this country none of the
21 casks that are currently used for spent fuel
22 transportation have been subjected to full-scale
23 regulatory confirmance testing, although this has
24 occurred in other countries, particularly in the
25 United Kingdom. As far as whether the Department

1 of Energy has a policy position conducive to full-
2 scale testing, as I said this morning, the State
3 of Nevada began discussing these issues with DOE
4 in 1991. In 1993 we had some detailed discussions
5 to try and estimate what the cost of full-scale
6 testing would be, because that's usually the
7 argument that's given as to why full-scale testing
8 is not a good idea. And I also want to clarify
9 that the State of Nevada has never said that full-
10 scale testing is a substitute for detailed
11 computer simulations, nor is it a substitute for
12 doing some tests in tenth-scale- or quarter-scale-
13 model testing, but that the full-scale testing
14 should be done in addition to the computer
15 analysis. Our best estimate of costs, and these
16 costs include the costs of upgrading the drop
17 facilities and the target facilities at the Sandia
18 National Labs, are in the range of about eight to
19 \$15 million dollars for each truck cask that is
20 tested and in the range of about 12 to \$25 million
21 for rail cask testing, although that number would
22 go down over time if the cost of upgrading the
23 facilities were amortized over more than one
24 package.

25 As far as why one would do full-scale

1 testing, it may or may not be necessary to
2 demonstrate physical performance when compared to
3 other approaches. For example, in a discussion of
4 this issue at the U.S. Nuclear Waste Technical
5 Review Board in November of 1997, one of the
6 compromise positions that was suggested by Larry
7 Fisher of Lawrence Livermore Labs was a
8 combination of half-scale testing, particularly of
9 the GA49 truck cask, arguing that you have to go
10 at least to half scale before certain components
11 like bolts, for example, could be properly tested.

12 At any rate, I'd just like to make these
13 comments for the record in preliminary fashion.

14 ...1 [We'll be filing detailed recommendations on them.
15 And the bottom line for us is that even if it
16 costs \$25 million to convincingly conduct full-
17 scale physical tests on large rail casks, that's a
18 small cost compared to the life-cycle
19 transportation costs, which DOE sets at about \$5.3
20 billion in table 2.5, which I've referred to
21 earlier. The State of Nevada's life-cycle cost
22 estimates range from a low of two billion to a
23 high of six billion. And in that framework we
24 think that money spent for full-scale testing
25 would be money well spent.] Thank you.

1 MS. SWEENEY: Thank you.

2 MR. LAWSON: Thank you. The next speaker is
3 John Dewes, to be followed by Ken Good and Pete
4 Wells.